



# THE COMMONWEALTH OF MASSACHUSETTS

## WATER RESOURCES COMMISSION

### **Meeting Minutes for June 14, 2001**

#### **Commission Members in Attendance:**

Mark P. Smith	Executive Director
Marilyn Contreas	Designee, DHCD
Dave Terry	Designee, DEP
Mark Tisa	Designee, DFWELE
Mike Gildesgame	Designee, DEM
Joe Pelczarski	designee, CZM (non-voting)
Richard Butler	Public Member
David Rich	Public Member
Gary Clayton	Public Member

#### **Others in Attendance:**

Daniel Garson	Woodard & Curran
Steve Garabedian	USGS
Linda Marler	DEM OWR
Lee Azinheira	Mansfield DPW
Michele Drury	DEM OWR
Jackie Murphy	EOEA
Susan Murphy	DEM
Susan Harrahy	NEPRWA
Martha Stevenson	LWVM
Kathy Rich	Mashpee Water District
Mike McCue	Town of Mansfield
Nina Danforth	DEM OWR
Louis P. Amoruso	Town of Mansfield
Dan Donovan	Town of Mansfield
David McArter	Town of Mansfield
John D'Agostino	Town of Mansfield
Bob Chapell	Woodard & Curran
Richard Friend	Woodard & Curran
Lorraine Downey	MWRA

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#### **Agenda Item 1: Executive Director's Report**

- The certificate on Reading's ENF to join the MWRA was issued recently. Reading is applying for admission to the MWRA, not because they need more water, but because they are interested in restoring the Ipswich River. Reading is not at its registered volume under the Water Management Act. This is a big issue from a policy perspective.
- Other towns are looking to the MWRA as well. Stoughton Town Meeting recently

approved MWRA as its regional solution to its long-term water supply needs. Two years ago, the WRC denied Stoughton's Cedar Swamp IBT application. The WRC acknowledged then that the Town had developed all viable local sources and they would need a regional source for long-term supply. Stoughton is under a DEP consent order to find a long-term water supply source.

Tisa asked about the process of choosing the MWRA as a source of water supply. How does it occur? When does the Quabbin run out of water? Smith answered that as part of the MEPA and IBT processes communities need to look at alternatives. We need to look at impacts to the donor basin under the Interbasin Transfer Act and the MWRA needs to look at impacts to its member communities. In order for an additional community to join the MWRA, there can be no negative impact. Tisa then asked if the MWRA had an estimate of how many other communities they could serve. Downey stated that she had heard estimates of 50 to 100 mgd extra supply, based on previous safe yield studies. Most of the communities that are considering admission are only requesting about 1-2 mgd, each. Drury stated that the MWRA Enabling Act requires that the Authority cannot exceed the safe yield of its water supply and they cannot impact the system and member communities. Smith stated that the MWRA's current demand is much lower than their estimated safe yield.

Wilmington is also looking at the MWRA, though they have not yet identified the MWRA as its preferred alternative.

Drury informed the Commission that Stoughton had submitted its DEIR/IBT application for admission to the MWRA. We will be looking at all these issues. Tisa asked if the issue of looking at the safe yield is part of the MEPA process. Drury responded that the MWRA has to do that for their Board and their analysis factors into our analysis as well.

- Foxborough's IBT application, discussed last month, is still before WRC. The public hearing was held on the Staff Recommendation on May 24th. Foxborough raised a number of concerns and asked us to postpone further consideration of the Staff Recommendation until staff can meet with them on June 20<sup>th</sup>. They are concerned about thresholds the WRC has set, especially at Witch Pond.
- The staff will be giving the WRC a presentation on the Lakes & Ponds Initiative soon. A Request for Proposals for a demonstration project recently went out. Proposals are due July 20<sup>th</sup>. The RFP is on the EOE, DEM and COMPASS websites.
- Smith is working on a project for buildout and potential future water needs. The WRC will be looking at regional demands at buildout and where water may be found to meet these demands. Gildesgame stated that the last time this was done on statewide basis was 20 years ago.
- There is a new EOE position, "Director of State Sustainability". The goal is to work with state agencies to make sure they operate on a sustainable basis. This will dovetail with much of the work we do here.

- Marler gave the hydrologic conditions report
  - May precipitation looks good: 92% of normal. However, this is a bit deceiving because the Southeast region received 120% of normal, but the Central and Northeast Regions only received 60% of normal. The average of April and May's precipitation for these regions is below 50% of normal. We are looking at the drought plan, just in case. We're not yet at the first stage, but we are concerned for these regions. Statewide, the water year's cumulative precipitation is 103% of normal, thanks to the rains of March. But the deficit in the Central Region is 5 inches, right now. It isn't expected to get any worse in June, however. The last page of the report presents a graph of regional differences. The benefits of the March rains is shown, but the Central and Connecticut River Regions didn't get these rains, so they are not doing as well.
  - Groundwater levels: The USGS shows below normal water table levels in May. Cape Cod still has below normal levels. However, the previous two months of rainfall has helped.
  - Streamflow in May was not good. From mid-April to mid-May, there were four weeks with no measurable rainfall and streamflow reflects this. During the first weekend of June we had some good rainfall. We are now waiting for the remnants of Tropical Storm Allison this weekend to bring us some more rainfall. Streamflow has improved since May. The USGS website show rivers at normal or slightly above normal in response to recent rainfall.
  - Water supply reservoirs: water suppliers are optimistic. Reservoir levels are 90% of full. The recent cool, cloudy weeks have resulted in lower demand for lawn watering.
  - Fire conditions weren't good in May, but have improved in June.
  - The forecast is for normal or neutral conditions. We are in a situation between El Niño and La Niña, which equals La Nada. Forecasters expect this to hold until December. Then, they expect a shift to El Niño conditions.
  - Smith asked what triggers the first stage of the drought plan. Marler responded that two months with cumulative precipitation of less than 65% of normal. We've had one of these months, but we also need to look at water tables and streamflow being below normal for two consecutive months. This hasn't occurred. It looks like we are in good shape for June. Smith stated that he wanted to make sure that the triggers set in the drought plan are valid.
  - Hurricane season kicked off on June 2<sup>nd</sup>.

**Agenda Items 2 & 3: Vote to approve the WRC Lawn and Landscape Water Conservation Guidance Document and Vote to approve release of the WRC Lawn and Landscape Water Conservation Policy for public comment:**

J. Murphy stated that the WRC is seeking approval on two different actions. She then went on to discuss the proposed policy (Agenda Item 3). Changes to the policy include incorporating the references discussed last month; there is also specific language regarding private water users not pumping directly from natural source waters and a discussion of irrigation as consumptive use (even though it appears that water is being recharged, water evaporates). With WRC approval, staff will release the policy for public hearings. Also, as discussed last month, the notice of public hearing includes a clarification on how DEP will use this policy.

Rich asked about the statement in the policy concerning “potential public safety problems”. The guidance document talks about “public health”. The two documents should be consistent. It was agreed to change the statement to “public health and safety” in both documents. It was also suggested that the website address where the documents can be found be put into the notice of public hearing.

Clayton made some editorial comments and asked where the public hearing notice would be posted. Murphy responded that it would go into the Environmental Monitor and be mailed out. Clayton had concerns about timing. Many people may be away for the summer. Can we give an extended comment period so that public officials and water works professionals will have an opportunity to comment? The Commission decided on a 60 day comment period. Suggestions were made as to who to include on the mailing list so that we get as broad a review as possible.

Other suggested changes were made regarding water-short communities, second water meters and state properties.

<b>V O T E</b>	Butler moved with a second by Contreas to approve for release for public comment the WRC Lawn and Landscape Water Conservation Policy.
	The motion was approved unanimously by those present

J. Murphy then discussed the guidance document and asked for approval to release it as educational outreach. The guidance document will be mailed to chief elected officials and public water suppliers. Gildesgame suggested that the cover letter for the guidance document link it to the policy. Clayton asked that if significant concerns were raised with the draft policy, will this create conflicts with the guidance. Smith responded that the guidance can be revised, but it is important to get it out this summer.

<b>V O T E</b>	Clayton moved with a second by Rich to approve the document, <u>A Guide To Lawn And Landscape Water Conservation</u> , for release to the public
	The motion was approved unanimously by those present

The Commission thanked Murphy for her hard work on the policy and guidebook.

**Agenda Item 4: Vote to approve the WRC Policy on Third Party Standing under the Interbasin Transfer Act and the proposed changes in the regulations.**

Drury reminded the Commission that this had been presented last month. At that time staff asked for comments but did not receive any. Staff has two proposals regarding the issue of third party standing: a regulation change and a written policy statement.

The regulation change is to reflect that we will entertain information from any source, including members of the public, for a determination of applicability. In addition, the proposed regulation distinguishes between a request for a determination of applicability and a request for a determination of insignificance, which are two very different processes, but which are lumped together in the current regulations. Drury acknowledged and thanked legal counsels from DEM and DEP for their help with this.

There are three subsections in proposed regulations. One concern heard was that the regulations are not specific in stating that the Commission will accept information from any source under a request for a determination of insignificance review. There is a very extensive section in regulations which deals with information needed for a determination of insignificance. This would be a more appropriate place to add the same sort of language. Staff is doing an internal regulation review right now and hope to get a full package of proposed regulation changes to the Commission when completed.

The written policy will be implemented immediately after approval by WRC. This formalizes the informal policy to respond to all inquiries from any interested party about Interbasin Transfer issues. Staff will respond in writing in a timely manner if requested. Some inquiries are very easy to handle because the regulations are quite clear. In other cases, the person making the inquiry may need or want documentation. If they make a request in writing for a written opinion, staff will respond in writing in a timely manner.

Smith stated that the policy is what we've done all along. The written statement will be included in our updated IBT guidance document. Drury stated that the reason why it has taken so long to get this to a vote is that there was some confusion as to the appeal process. We will put in a section about the appeal process under the Act in the updated guidebook.

<b>V O T E</b>	Rich moved with a second by Clayton :
	to approve the proposed regulation change and policy on third party standing under the Interbasin Transfer Act, as described in the May 10, 2001 memo from Michele Drury to the Commission
	The motion was approved unanimously by those present

**Agenda Item 5: Vote on Mansfield compliance with the conditions of the June 8, 2000 WRC decision:**

Smith acknowledged the representatives from Mansfield. He stated that a vote to approve would allow the town to install, but not operate, the Morrison well. Drury reminded the Commission that this was presented last month. At that time, the Town had met many of the conditions listed in the decision, but there were some items that needed clarification.

Under the water audit condition, which staff did recommend that they had met, Staff also recommended that in future water audits, the effectiveness of existing water conservation measures should be evaluated. The town has agreed to this recommendation.

Staff asked for more detail on their residential water conservation program. This has been provided. The town will continue with their aggressive program to encourage the installation of household water saving devices. In addition, they are also going to implement a program of toilet rebates. Over a five year period, the town will be issuing a rebate of \$100 per toilet. They are also going to institute a lawn watering program. We will send Mansfield the lawn watering guidance and policy discussed here earlier. This month we can recommend that the town has met this condition. They have not yet funded the rebate program, as it has to go to town meeting. We will require that before any water is pumped from the Morrison well, the Town must provide documentation that the program has been funded.

Under the monitoring plan, staff requested that they provide the survey data and make some edits and revisions. The monitoring plan must be approved by the WRC, Natural Heritage and DEP. DEP approved it last month. Natural Heritage stated last month that it would like to review the results of the plan, but that it is adequate for the monitoring to proceed. Having reviewed the revisions and survey data, Staff is recommending that the WRC approve the monitoring plan. All of the other conditions under Criterion 5 are related to the monitoring plan and/or are ongoing.

In addition, the town is requesting that they be allowed to substitute Observation Well C for the threshold point 9-97. The purpose for this threshold point is to protect the aquifer level next to the brook. The reason for the request is that using this point will result in less disturbance to the wetland from the installation and maintenance of automatic monitoring equipment. Staff and DEP concur that this will provide same amount of protection, so we are recommending that this be done.

The final outstanding issue last month was the Local Water Resources Management Plan. The Town was required to submit an outline and timeline for this plan. Staff recommended modifications to provide more detail in the outline. This has been done. We will make a recommendation concerning approval of the Local Water Resources Management Plan once we have had a chance to review it.

In summary, Staff is recommending that Mansfield has met all the conditions that must be met before they can install the Morrison well, therefore the WRC should allow the Town to proceed with the installation. Staff noted that the other conditions are ongoing, and the Town made a commitment to abide by these conditions in a letter dated May 4, 2000.

Clayton asked about the funding mechanisms for these programs. D'Agostino responded that the town has an enterprise fund, but also needed to have certain appropriations approved by town meeting.

Clayton asked if this would allow the well to be installed, but not operated. Smith responded that there are some conditions that must be met before the well can operate, including the year of baseline monitoring. Before the vote, Smith stated recognized the efforts made by all to get to where we are now. This reflects the success of the IBT Performance Standards.

<b>V O T E</b>	Terry moved with a second by Butler that:  The Commission finds the Town of Mansfield is in compliance with the conditions of the June 8, 2000 decision, as specified in the June 14, 2001 memo from Staff to the Commission, and therefore has met the conditions to allow the well to be installed.  The motion was approved unanimously by those present
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**Agenda Item 6: Presentation of the inventory of “grandfathered” interbasin transfer wastewater systems:**

Smith reminded the Commission that as part of this year’s work plan, the Commission was to look at wastewater issues under the Interbasin Transfer Act.

S. Murphy presented the work she was doing compiling an inventory of “grandfathered” wastewater systems. Concern about grandfathering arose during the Wilmington issue and was also discussed by the wastewater task force. Wilmington is minimally sewered but had a pre-existing connection to an out-of-basin system, and so was exempt from ITA review. The goal of this project is to see if any other systems like this existed in the state.

There are 13 regional wastewater systems in Massachusetts and one in Woonsocket RI that accepts wastewater from Bellingham and Blackstone. Of these, the Edgartown system does not involve an interbasin transfer because it injects to groundwater, so this system was not considered further. For each of these other systems, we talked to the operators to obtain design flows. Design flows have two criteria: average daily flows and peak design flow for severe weather conditions. This study concentrated on average daily flows because this gives the best picture of the long-term potential for the possible increase in interbasin transfer of wastewater, although the final report will address peak flows, as well.

She collected the actual wastewater flows, by community, for calendar year 2000 and looked at how the allocation of capacity was made. Some systems made specific allocations to member communities; others have no specific flow limit by community and the amounts of wastewater flow accepted are dependant on overall capacity of plant. She also obtained information about where the point of discharge is located and when the plants were built. From each member community, she obtained information concerning the extent of sewerage in the community (sewered versus unsewered locations), the community’s future plans for sewerage and the location of their water supply source. She

also obtained population projections from the regional planning agencies, as an indicator of growth in these communities. All this information will be put together by end of the month. This presentation is just a summary.

Pelczarski asked what defines a regional treatment plant. Murphy replied that any system which takes wastewater from a community other than where the wastewater is discharged. Pelczarski asked about Haverhill, which takes wastewater from Groveland. Murphy responded that another reason for the presentation is to find out if she missed any systems. There are some systems which take septage from other communities but these were not included.

Murphy presented a map of the state showing regional systems which are operating over their design capacities, systems which have some excess capacity and systems with a great deal of excess capacity. The systems with a great deal of excess capacity are generally the larger systems: the MWRA, the Springfield system, the Upper Blackstone Water Pollution control District and the Greater Lawrence Sanitary District. These systems have greater than 19 mgd of available capacity. This presentation will concentrate on the large systems, although all of the same type of information was collected for all regional systems.

Within the MWRA system, some communities do have unsewered areas. Murphy presented a graph showing these. This graph gives an idea of which basins have the potential to experience more sewerage. The graph also indicates from which basin the water supply for each member community is obtained. The MWRA has looked at the projected growth in its system. Although it has a large amount of excess capacity, the Authority does not expect a lot of growth because any increase in sewerage will be balanced by a decrease in flow in core communities. But this graph us an idea of where the areas with the potential to increase sewerage are located and what this means for increases in interbasin transfers.

Springfield has about 30 mgd of unused capacity. Most of the member communities are nearly fully sewerage, with the exception of Ludlow, Wilbraham and a small portion of Agawam. Although Wilbraham has a lot of unsewered area, they are at their allotted capacity, but Ludlow has about 3 mgd of unused capacity.

The Worcester system has about 19 mgd of unused capacity. Rutland, Holden and West Boylston (MDC Trunk Line) are currently being sewerage. This project was reviewed by the WRC and the Commission decided it was grandfathered under the Act. The trunk line's capacity is 3.2 mgd, so it will not use up all the capacity in the Worcester system. Worcester does not allocate capacity among member communities. Therefore, we've looked at population growth to try to determine where growth in wastewater transfers could occur. The City of Worcester is predicted to grow by 3%, whereas Holden's growth will be greater. This will result in a greater potential for wastewater flow. The buildout analysis, when completed, could be incorporated into this study to give a better idea of where we might see increases in wastewater transfers.



The Lawrence system has 22 mgd of unused capacity. Andover and North Andover have area in the Ipswich River basin that is unsewered, but the water supply source is in the Merrimack basin. Any sewerage in this area will return flow to its basin of origin; therefore, it would not result in an interbasin transfer. The South Essex system also has area in the Ipswich basin, but most member communities are 99% sewerage, so there is not a great potential for growth. The Lynn and Lowell systems operate over capacity. There is some potential for members of the Lowell system to increase their flow at expense of Lowell, which is a combined system.

The intent of this project is to create a database that can be used to identify future problems and that can be used in conjunction with other work that has been going on, for example, the stressed basin project. One can compare highly stressed basins with areas that could be sewerage, in Rutland for example.

Smith stated this shows areas where there are issues. The report will help the agencies decide how to prioritize the sewer extension review. Clayton thanked Murphy for her work. Pelczarski asked about peak flows. Does excess rainfall cause a system to exceed capacity? Murphy answered that peak flow is included in design capacity, but MWRA's permit only takes into account dry weather flow. Pelczarski asked if it was appropriate to be working with averages. Smith answered yes, because a plant can't run effectively if it is always at capacity. DEP has guidance on this. If a plant keeps hitting or exceeding its capacity due to peak flows, DEP will require that the system get into the planning process. Peak flows and average flows tell different things. For this analysis, average flow is appropriate.

Clayton asked if systems with excess capacity are actively looking for new customers. Murphy responded that this research only looked at the grandfathered aspects of these systems. If they expand to other communities, these would not be grandfathered and would need Interbasin Transfer review, if an out-of-basin transfer was involved.

Smith stated that when these systems were built 20 years ago, they planned for a certain flow and member communities planned their sewerage in phases. However, in some cases, just because there is capacity available for a member community, it doesn't mean that these communities can sewer the entire town, as in Bellingham. Under DEP, other issues will need to be looked at.

Stevenson asked about MWRA and Wilmington. Drury stated that if a system is grandfathered under the Act, the WRC has no jurisdiction. One of things staff are trying to do through the task force and this project is to identify areas that are of concern in order to focus on the programs which have jurisdiction to address these concerns.

Smith stated that Wilmington is being required by DEP to complete a CWMP before it can expand its sewerage area, even though they are an MWRA sewer member and have been paying as if they were 100% sewerage for years.

Garabedian expressed caution about using this with the stressed basin work. USGS gages were used to identify stressed areas and because gaging coverage is incomplete, some stresses will show up, but not all.

Meeting adjourned.

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Minutes approved 1/9/03